

instruments. The clinical validity and responsiveness of the QLQ-BM22 was tested by known group comparisons of different performance status and response to radiotherapy.

Results: Two hundred and four patients completed both questionnaires at baseline and follow up. On multitrait scaling analysis, there was mixed evidence of construct validity, likely explained by the format of the questionnaire and population characteristics. There was little correlation between most QLQ-BM22 and QLQ-C15-PAL items, except for the conceptually related scales. There were statistically significant differences in all QLQ-BM22 scale scores in groups with KPS < 80 versus KPS ≥ 80 and three out of four QLQ-BM22 scale scores in “responders” versus “non-responders” to radiotherapy. In patients who responded to radiotherapy, there were statistically significant differences in all QLQ-BM22 scale scores between baseline and follow up.

Conclusions: This study further validates the use of the QLQ-BM22 as a robust and sensitive instrument to assess QOL in patients with bone metastases treated with palliative radiotherapy.

250

MINIMAL CLINICALLY IMPORTANT DIFFERENCES IN THE EORTC QLQ-BM22 AND EORTC QLQ-C15-PAL MODULES IN PATIENTS WITH BONE METASTASES

Srinivas Raman¹, Keyue Ding², Edward Chow¹, Ralph Meyer³, Abdenour Nabil⁴, Pierre Chabot⁵, Genevieve Coulombe⁶, Shahida Ahmed⁷, Joda Kuk⁸, A Rashid Dar⁹, Aamer Mahmud¹⁰, Alysa Fairchild¹¹, Carolyn F Wilson¹², Jackson SY Wu¹³, Kristopher Dennis¹³, Carlo DeAngelis¹, Rebecca KS Wong¹⁴, Liting Zhu², Michael Brundage¹⁵

¹Sunnybrook Odette Cancer Centre, University of Toronto, Toronto, ON

²Canadian Clinical Trials Group, Cancer Research Institute, Queen's University, Kingston, ON

³Juravinski Hospital and Cancer Centre and McMaster University, Hamilton, ON

⁴Centre Hospitalier Universitaire de Sherbrooke, Sherbrooke, QC

⁵Hopital Maisonneuve-Rosemont, Montreal, QC

⁶CHUM-Hopital Notre-Dame, Montreal, QC

⁷CancerCare Manitoba, Winnipeg, MB

⁸Grand River Regional Cancer Centre, Kitchener, ON

⁹London Regional Cancer Program, London, ON

¹⁰Cancer Centre of Southeastern Ontario, Kingston, ON

¹¹Cross Cancer Institute, Edmonton, AB

¹²Tom Baker Cancer Centre, University of Calgary, Calgary, AB

¹³University of Ottawa; Ottawa Hospital Research Institute, Ottawa, ON

¹⁴Princess Margaret Hospital, University of Toronto, Toronto, ON

¹⁵Queen's University, Kingston, ON

Purpose: Validated tools for evaluating quality of life (QOL) in patients with bone metastases include the EORTC QLQ-BM22 and QLQ-C15-PAL modules. A statistically significant difference in metric scores may not be clinically significant. To aid in their interpretation, we performed analyses to determine the minimal clinically important differences (MCID) for these QOL instruments.

Methods and Materials: Both anchor-based and distribution-based methods were used to determine the MCID among patients with bone metastases enrolled in a randomized Phase III trial. For the anchor-based approach, overall QOL as measured by the QLQ-C15-PAL module was used as the anchor and only the subscales with moderate or better correlation were used for subsequent MCID analysis. In the anchor-based approach, patients were classified as improved, stable or deteriorated by the change in the overall QOL score from baseline to follow up after 42 days. The MCID and confidence interval was then calculated for all subscales. In the distribution-based approach, the MCID was expressed as a proportion of the standard deviation and standard error measurement from the subscale score distribution.

Results: Two hundred and four patients completed both

questionnaires at baseline and follow up. Only the dyspnea and insomnia subscales did not have at least moderate correlation with the overall QOL anchor. Using the anchor-based approach, 10/11 subscales had a statistically significant MCID score for improvement and 3/11 subscales had a statistically significant MCID score for deterioration. The magnitude of MCID scores was higher for improvement in comparison to deterioration. For improvement, the anchor-based approach showed good agreement with the distribution based approach when using 0.5 SD as the MCID. However, there was more variability in the agreement between these approaches for deterioration. **Conclusions:** We present the MCID scores for the EORTC QLQ-BM22 and QLQ-C15-PAL QOL instruments. The results of this study can guide clinicians in the interpretation of these instruments.

251

WILM'S TUMOUR (WT) IN GHANA - OUTCOMES AND OPPORTUNITIES

Zekarias Berhe¹, Verna Vanderpuye¹, Zahra Kassam², David Hodgson², Joel Yarnes¹, Rebecca Wong²

¹Korle bu Teaching Hospital, Accra, Ghana

²University of Toronto, Princess Margaret Cancer Centre, Toronto, ON

Purpose: Patients diagnosed with WT in low and middle income countries face many incremental challenges compared to those diagnosed in high income countries. The objectives of our study are: 1) to describe patient outcomes in Ghana; and 2) to identify opportunities for improvement.

Methods and Materials: Methodology Retrospective chart review was undertaken supplemented by telephone follow up to ascertain disease status and adverse effects. Patients who are age ≤ 14 years, diagnosis with WT that is histologically confirmed between January 2005 - December 2014, treated with curative surgery with or without adjuvant RT at our institution were eligible.

Results: One hundred and one patients were identified. Median age was 56 (range 1-168) months and median follow up was 38 (range 1-86) months. Staging imaging consisted of ultrasound in the early years and CT scan since 2012. Fifty-seven patients presented with advanced Stage (clinical Stage I 0, II 42, III 25, IV 31, stage not available 3). All patients were treated with neoadjuvant chemotherapy (Vincristine, Actinomycin D ± Adriamycin) followed by radical nephrectomy (99), except two had upfront surgery. At surgery, advanced stage was found in 73% (pathologic Stage I 0, II 29, III 58, IV 14, V 1). Forty-five patients were referred for radiotherapy with positive margins (14), positive lymph nodes (eight), residual disease (five), peritoneal spillage (seven) and unfavourable histology (11). Ten patients did not report for RT. Mean interval from surgery to RT was 36.6 days. 2D technique (APPA fields to the flank or whole abdomen± lungs) with 10.8-21.6 Gy in 6-12 fractions was used. Thirty-three patients completed RT without interruptions. Acute Grade 2 toxicities for the RT group included: diarrhea (seven) and vomiting in (nine). Late side effects included intestinal obstructions (two), chronic renal disease (one) and cardiomyopathy (one). Site of first recurrence was within the radiation field (five) and distant metastasis (two). Two-year OS and DFS were 56% and 44% respectively. Two-year OS for the whole group was 31% and 39% respectively. Main reasons for interruption were monetary.

Conclusions: WT patients in Ghana have more advanced pathological stage than clinical stage despite neoadjuvant chemotherapy. This is attributable to suboptimal pre-operative staging. The interval between surgery and RT is long. Quality improvement strategies including uniform provision of CT-scan for staging and reduction in the interval between surgery and RT is achievable in our current practice environment and expected to improve outcomes. This is urgently needed.